

Clarifying 'Due Account' Expectations: The Swedish Copper Canister Case

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Decision-making in extractive industries sector, on energy & climate



Aarhus Convention Compliance Committee Task
Force on Public Participation in Decision-making,
Geneva, 1 March, 2021

Clarifying Due Account Expectations: The Swedish Copper Canister Case

- 1 Background
- 2 Swedish governance standards
- 3 Information asymmetry
- 3 Trust in safety authority neutrality
- 4 Recommendations for codification of elevated oversight mechanisms

Swedish municipality gives approval for fuel repository

14 October 2020



In what Svensk Kärnbränslehantering AB (SKB) describes as a "historic decision", the municipal council of Östhammar yesterday voted in favour of its planned repository for used nuclear fuel at Forsmark. The final decision to authorise the project will now be made by the Swedish government.





Sweden ▼

2020 ▼

WEAR

Sweden

REGION

EU & EFTA & North America

INCOME

OVERALL

CHANGE OVER TIME

RANK

SU

OVERALL INDEX SCORE

Explore by Issue/Factor

1 | CONSTRAINTS ON GOVERNMENT POWERS ⓘ

2 | ABSENCE OF CORRUPTION ⓘ

3 | OPEN GOVERNMENT ⓘ

4 | FUNDAMENTAL RIGHTS ⓘ

5 | ORDER AND SECURITY ⓘ

6 | REGULATORY ENFORCEMENT ⓘ

7 | CIVIL JUSTICE ⓘ

8 | CRIMINAL JUSTICE ⓘ

Sweden Overall Score, 2020

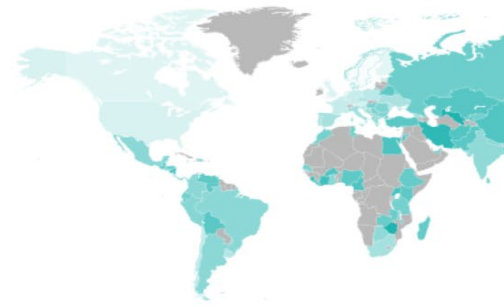
OVERALL SCORE

0.86↑

GLOBAL RANK

4/128

WJP Open Government Index



Most open ←

Country	Score	Global Ranking	Country
Sweden	0.81	1	Sri Lanka
New Zealand	0.81	2	Dominica
Norway	0.81	3	Albania
Denmark	0.78	4	Senegal
Netherlands	0.76	5	Hungary
Finland	0.76	6	Jamaica
Canada	0.75	7	El Salvador
United Kingdom	0.74	8	Tunisia
Australia	0.74	9	Morocco
Republic of Korea	0.73	10	Serbia
United States	0.73	11	Tanzania
Japan	0.72	12	Ecuador
Austria	0.72	13	Kyrgyzstan
Estonia	0.72	14	Malawi
Germany	0.72	15	Honduras
Belgium	0.70	16	Russia
France	0.69	17	Thailand
Chile	0.68	18	United Arab Emirates
Costa Rica	0.68	19	Guatemala
Poland	0.67	20	Liberia
Uruguay	0.65	21	Zambia
Czech Republic	0.64	22	Bangladesh
Portugal	0.64	23	Madagascar
Hong Kong SAR, China	0.63	24	Mongolia
Singapore	0.63	25	Jordan
Spain	0.62	26	Nigeria
South Africa	0.62	27	Belarus
Italy	0.61	28	Kenya
Georgia	0.61	29	Bolivia
Slovenia	0.60	30	Lebanon
Bosnia and Herzegovina	0.59	31	Turkey
Indonesia	0.58	32	Pakistan
Croatia	0.58	33	Nicaragua
Macedonia, FYR	0.57	34	Kazakhstan
Botswana	0.57	35	Vietnam
Greece	0.57	36	China
India	0.57	37	Malaysia
Brazil	0.56	38	Afghanistan
Colombia	0.56	39	Burkina Faso
Nepal	0.56	40	Egypt
Ghana	0.56	41	Uganda
Mexico	0.56	42	Cote d'Ivoire
Ukraine	0.56	43	Ethiopia
Argentina	0.56	44	Cameroon
Panama	0.55	45	Sierra Leone
Moldova	0.55	46	Venezuela
Peru	0.55	47	Cambodia
Belize	0.55	48	Iran
Bulgaria	0.54	49	Myanmar
Philippines	0.54	50	Uzbekistan
Romania	0.53	51	Zimbabwe

Most open ←

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Statement of SSM's views

Date: 23 January 2018

Ref. no: SSM2011-1135 and SSM2015-279

repository after closure, as well as an associated F-PSAR, SKB has demonstrated that the KBS-3V repository concept has the potential to meet the Authority's regulatory requirements for long-term nuclear safety and radiation protection.

- From the perspective of radiation protection and safety, SKB has observed the provisions of Chapter 2 of the Environmental Code in development and siting of the KBS-3 system for final management of spent nuclear fuel, and has applied these provisions to the extent that it cannot be considered unrealistic to fulfil them. These include requirements on knowledge and skills, the adoption of



NACKA TINGSRÄTT

Mark- och miljödomstolen

Nacka District Court

Land and Environment Court

Statement

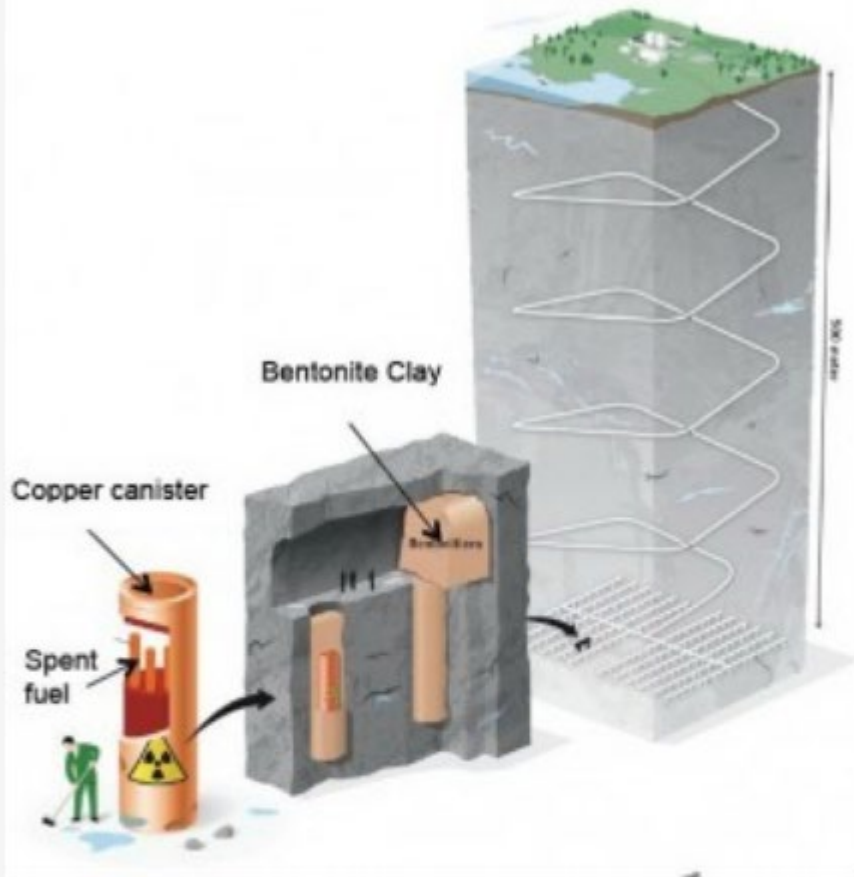
Summary

2018-01-23

Case no. M 1333-11

File appendix 843

The investigation shows that there are uncertainties, or risks, regarding how much certain forms of corrosion and other processes can impair the ability of the canister to contain the nuclear waste in the long term. Overall, these uncertainties about the canister are significant and have not been fully taken into account in the conclusions of SKB's safety analysis.



The so-called KBS-3 method, suggested in Sweden in the 1980s, proposes placing spent fuel inside hermetically sealed copper canisters in a bentonite clay environment in crystalline bedrock at a depth of 500 meters. (Source: mkg.se.)

Copper canister radioactive risk threshold

Environmental Code:

Technical safety standards must be met before a licence may be approved

Land and Environmental Court:

Technical safety inadequate for an SSM official opinion

Radioactive Safety Authority(SSM):

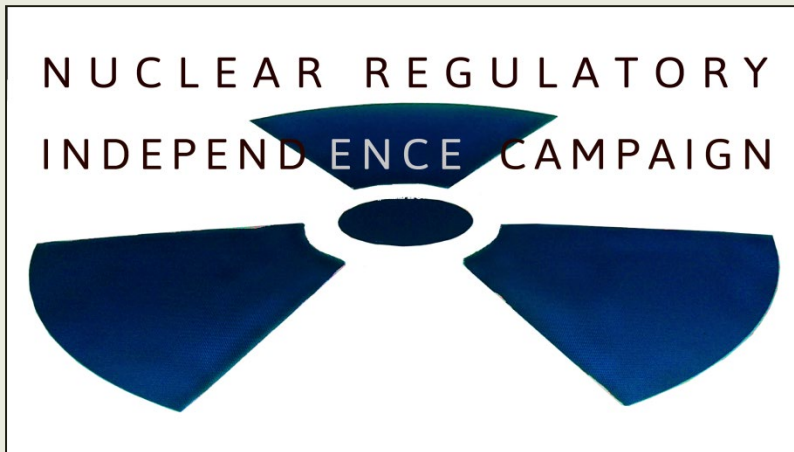
Technical safety acceptable for government review of license application

What features constitute an effective decision-making advisory protocol?

- Metrics to suggest whether authority is noticeably failing to take into account the views of stakeholders?
- Full access to confidential industry data to select group of stakeholders?
- Creation of an independent documentation centre?

What features ensure an independent nuclear regulatory authority?

- 1 Pluralistic appointment procedure
- 2 Organized traceability of decision taken
- 3 Strong conflict of interest mechanisms
- 4 Accountability mechanisms
- 5 Equal access to industry data



- European NGO network
- promotes citizen watch on nuclear safety, transparency and public participation in decision-making
- ad hoc coalition of sustainable development NGOs

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